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SMITH PATENT OFFICE
1901 PENNSYLVANIA AVENUE N W
SUITE 200
WASHINGTON, DC 20006

EXAMINER	
JARRETT, SCOTT L	
ART UNIT	**PAPER NUMBER**
3623	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/898,463	MIFUNE ET AL.	
	Examiner	Art Unit	
	Scott L. Jarrett	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 July 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *05 July 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3/20/2002*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Title

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Mobile Medical Appointment Scheduling and Guidance System and Method

Drawings

3. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because Figure 6, Element 52 misspelled the word medical ("madical"). Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Objections

4. Claims 9-10 objected to because of the following informalities: claims 9 and 10 are duplicates. Examiner suggests applicants cancel and/or amend one or both claims to overcome this objection.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 4 and 14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding Claims 4 and 14 examiner requests clarification as to how the claimed system can provide (display, send, etc.) appointment cancellation notices to patients who have not made (not-scheduled) an appointment; for a patient that does not have (has not made an) appointment cannot have the non-existent (non-made, non-scheduled) appointment canceled or subsequently receive a cancellation notification for a non-existent appointment.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1, 4, 11, 14 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claims 4 and 14 the disclosure does not clearly define the phrase "made appointment." The phrase made appointment as claimed could be interpreted in a plurality of ways including but not limited to: created, requested, confirmed, scheduled, started, arrived at (e.g. "I just made that appointment") and the like thereby making the phrase "made appointment" as claimed vague and indefinite.

Regarding Claims 1, 11 and 19 the disclosure does not clearly define the phrase "virtual reality." The phrase virtual reality as claimed could be interpreted in a plurality of ways including but not limited to: an artificial environment created with computer hardware and software and presented to the user in such a way that it appears and feels like a real environment, computer simulation of a real 3-dimensional world, interactive system which totally controls sensory input and creates the convincing illusion that one is completely immersed in a computer-generated world, a simple display wherein user/item locations are

represented/displayed in a manner reflecting their status, location, etc. in real-time ("reality") or the like thereby making the phrase "virtual reality" as claimed vague and indefinite.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirsch et al., WO 97/25682, in view of Tognazzini, U.S. Patent No. 5,790,974 and further in view of Wayne et al., U.S. Patent No. 5,006,983.

11. Regarding Claims 1 and 19 Hirsch et al. teach a system and method for optimally scheduling medical resources (operating room, equipment, staff, etc.) related to one or more patient medical procedures wherein a medical procedure comprises a series/sequence of appointments (phases) and each appointment comprises reservations/bookings for a plurality of required medical procedure (e.g. examination, surgery, etc.) items (resources) including but not limited to: operating rooms, staff/personnel, medical equipment, patients and the like (Abstract).

More specifically Hirsch et al. teach that the medical procedure scheduling method and system:

- utilizes a plurality of computing platforms (Page 12, Lines 26-27) wherein the computing platform includes a computer, network connectivity and wireless communication subsystem ("paging software"; Page 13, Line 15, Page 14, Line 5);

- has a client server architecture (distributed computing consisting of one or more client devices and a server; Page 13, Lines 7-9);

- provides a graphical user interface (Figures 1-12);

- includes an appointment scheduler subsystem (component, module, software, code, etc.) comprising ("...identifying the resources required for performing each of said plurality of medical procedures and determining every feasible schedule for the plurality of medical procedures...", Page 4, Lines 9-13; Page 18, Lines 1-27; Figures 11, 14A-14B):

  - a queue (ordered list, array, sequence, schedule, line, etc.) of patients ("first come first serve" policy/procedure, Page 19, Lines 2-5; Page 10, Lines 1-7 and 15-17; Page 15, Lines 26-30; Page 16, Lines 1-9; Figures 2-3);
  - a schedule for each examination item (equipment, resources, personnel, etc.; Page 6, Lines 10-19; Figures 4-12); and
  - a schedule for each patient comprising examination items needed for patient's examination (Page 6, Lines 10-19; Figure 11);

- a schedule optimization subsystem (engine) wherein schedules are optimized utilizing well known and commercially available systems (e.g. CPLEX; Page 19, Lines 19-23) that optimize cost functions/custom optimization criteria/factors/constraints including but not limited to: priorities, unscheduled events, waiting lists (e.g. queues), precedence (e.g. order, sequence of events) and the like (Page 10, Lines 7-9; Page 11, Lines 1-30; Figure 13);

- scheduling a plurality of patient medical procedures (cases, equipment, personnel, etc.) based on user requests (e.g. surgeons requests a plurality of resources to perform a medical procedure for a patients) include start time/day, required resources (operating room, equipment, personnel/staff, etc.) and a plurality of system constraints, hospital policies/procedures (Pages 11-12; Figure 13).

- displays schedules (images, icons, text, etc.) corresponding to the appointment schedule of medical procedures (patients, equipment, surgeons, etc.) including the location of patients (e.g. the operating room being utilized by a patient at a particular moment in time; Figures 14A-14B);

- generating (forming, determining, etc.) and displaying examination guidance to individual patients wherein the guidance comprises the order and start times for each of the scheduled medical equipment/items (e.g. appointment/schedule information; Page 10, Lines 1-8; Page 18, Lines 1-15; Figures 11-12).

Hirsch et al. further teach that the medical procedure scheduling system and method:

- divides days into a plurality of time slots, i.e. a day representing a schedule/queue of sequentially scheduled appointments, wherein some of the time slots are empty (physically vacant, unused, not-scheduled, etc.; Column 14, Lines 9-20; Figures 14A-14B);

- determines and utilizes an inconvenience period, defined as the difference between the appointment start time requested and start time scheduled, as a schedule optimization constraint/criteria to ensure a users' requested start time is not scheduled later than a predetermined amount/threshold (Page 14, Lines 13-20);

- treats appointment schedule requests on a first come first serve basis (e.g. a FIFO queue; Page 19, Lines 2-15); and

- determines the average times to perform medical procedures (Page 16, Lines 25-28) and utilizes that time to determine expected appointment completion time (Page 18, Lines 10-15).

Hirsch et al. does not expressly teach that the medical procedure scheduling system and method provides plurality of wireless handheld devices to each patient, represents/models medical examination and/or medical examination items utilizing queue data structures or schedules appointments to start at the earliest possible time.

Tognazzini teaches the utilization of wireless handheld devices by users to manage and "navigate" a plurality of scheduled appointments, in analogous art of

scheduling (appointment management, personal information management, etc.), for the purposes of providing users with accurate and up-to-date schedules, location based appointment reminders and appointment route guidance (Abstract; Column 1, Lines 5-68; Column 2, Lines 1-68).

Tognazzini teaches a portable location based scheduling system and method comprising:

- providing one or more wireless handheld devices (e.g. personal digital assistant, cell phone, laptop, wireless devices, etc.) to users wherein the wireless handheld devices include a display and wireless communication components (Column 4, Lines 41-68; Figure 1);

- a server including a display, memory, processing, wireless/wired communication component(s) (Column 4, Lines 40-68; Column 5, Lines 1-20; Figure 1);

- determining schedule/appointment delays based on the users schedule, current location, next scheduled appointment location and start time and alerts users of the delays (Column 7, Lines 3-10);

- creating and displays scheduled appointment guidance including but not limited to order/sequence, start times and travel route (map and directions; Column 2, Lines 1-25; Column 12, Lines 60-68);

- near real-time synchronizing of schedule/appointment information between the user's wireless handheld device and the central system (server, office system; Abstract; Column 1, Lines 63-68); and

- enabling access to the system (e.g. database) from an external network ("paging network"; Column 6, Lines 18-44; Figure 1).

It would have been obvious to one skilled in the art at the time of the invention that the medical procedure scheduling system and method, with its ability to dynamically schedule, optimize and notify (e.g. via a wireless paging system) patients and other resources of their schedules, as taught by Hirsch et al. would have benefited from providing patients with a portable calendaring/scheduling system and method wherein each user utilizes a handheld wireless device that provides location based scheduling and appointment guidance (appointment, schedule, maps/directions to scheduled appointments, etc.) in view of Tognazzini; the resultant system automatically responding to and communicating changes to a remote users' schedule of appointments thereby making it easier for patients to monitor their schedule and receive dynamic appointment/schedule route guidance information remotely (Column 1, Lines 50-53).

Wayne et al. teach utilizing a plurality of queues to allocate (schedule, provide) services, in an analogous art of scheduling and queue management (e.g. medical appointment scheduling; Column 1, Lines 5-24), for the purposes of providing (allocating) services to a plurality of individuals who have requested services (Abstract) while alleviating individual "aggravation" associated with waiting in a line/queue to be serviced (Column 1, Lines 5-24).

Wayne et al. teach that the service scheduling system and method comprises:

- a plurality of wireless communication devices held by (assigned to) each individual requesting services in communication with a central system/server (Column 1, Lines 40-45; Figures 3-4);

- assigning each individual to one of a plurality of queues for scheduling purposes (Column 1, Lines 45-50; Column 5, Lines 3-10; Figure 7);

- indicating that a service resource (e.g. medical examination item) is available, notifying the "next" individual (e.g. patient) that service is available and providing the requested services (e.g. medical examination) to the "next" individual in the queue (Column 1, Lines 40-65; Column 3, Lines 2-9);

- providing (scheduling) services to start at the earliest possible start time (e.g. FIFO queue; Column 1, Lines 57-60);

- enabling the moving (reassignment) of individuals between one or more of the plurality of queues (Column 1, Lines 60-68; Column 14, Lines 15-68);

- determining an expected wait period/time (Column 2, Lines 5-12; Figure 19);

- tracking/monitoring and alerting the user of his/her status in the queue (location in line, time spent in line, etc.; Column 12, Lines 19-45); and

- optimizing the allocation/scheduling of services so as to minimize an individual's total wait/service time such that:

  - if a users/individuals' total wait time (service time) is below a predetermined threshold they remain in the queue ("If the customer spent

no more than five minutes outside his shopping queue, the customer will continue to wait for the proper agent.", Column 17, Lines 25-30) or

- if a users/individuals' total wait time (service time) is above a predetermined threshold the system relaxes several of the scheduling constraints in order to minimize the individuals total wait/service time (Column 17, Lines 31-49).

It would have been obvious to one skilled in the art at the time of the invention that the medical procedure scheduling system and method, with its ability to optimally schedule a plurality of medical procedures based on a plurality of constraints such as waiting lines/queues and unanticipated/unplanned events, as taught by Hirsch et al. would have benefited from modeling/representing appointment requests and medical examination schedules as queues in view of the teachings of Wayne et al.; the resultant system being further adapted to efficiently handle unanticipated/unscheduled medical procedure requests (e.g. the occurrence of a natural disaster requires the medical facility to queue a large number of unanticipated patients to be scheduled for medical procedures; Hirsch et al.: Page 2, Lines 6-9).

Official notice is taken that the scheduling of appointments for the earliest possible start time, for example individuals waiting in a line (queue) for a service inherently schedules appointments/services to be provided at the earliest possible time.

Further official notice is taken that scheduling of appointments for the earliest possible start time wherein the earliest start time of an appointment is determined by the earliest possible availability of one or a plurality of resources necessary for the appointment (e.g. patient, doctor, room, equipment availability, etc.) is old and very well known in the art to ensure that the appointment is not schedule at a time where the requested service can not be provided.

It would have been obvious to one skilled in the art at the time of the invention that the medical procedure scheduling method and system, with its ability to accept medical examination and medical examination item requests from a plurality of users wherein the requests are processed on a first come/first serve basis (i.e. first in first out, FIFO, queue) and its ability to dynamically adapt/revise/optimize appointment schedules to meet unanticipated events (delays, emergencies, etc.) and ensure resource availability, as taught by Hirsch et al. would have benefited from scheduling appointments to start at the earliest time possible (e.g. scheduling an emergency procedure as soon as possible) wherein the earliest start time possible for the appointment is determined by the earliest time one or more required resources (patients, doctors, equipment, etc.) are all available in view of the teachings of official notice; the resultant system being "equipped to handle unexpected events such as emergencies.." in an efficient and systematic manner (Hirsch et al.: Page 2, Lines 6-9).

12. Regarding Claims 2 and 12 Hirsch et al. teach a medical procedure scheduling system and method further comprising:

- not confirming a schedule if it is not feasible (i.e. does not meet all the system constraints);

- utilizing a two step optimization process comprising the determination of all the feasible (meet resource availability and other constraint requirements, tentative/proposed/unconfirmed schedule) and the selects the optimal schedule based on the constraints/cost functions provided ("...displaying to a user visual representations of a plurality of optimal schedules...", Page 5, Line 29; Page 5, Lines 10-15; Page 10, Lines 1-8; Figure 13);

- repeating (retrying, re-running, restarting, etc.) the scheduling process (optimization process) until all the system constraints (policies, procedures, criteria, etc.) are met (Page 18, Lines 24-26);

- revising (updating, rescheduling) the schedule by "...taking into account actual conditions and the initial optimal schedule." (Page 5, Lines 23-24);

- determining and utilizing an inconvenience period, defined as the difference between the appointment start time requested and start time scheduled, as a schedule optimization constraint/criteria to ensure users requested start times are not scheduled later than a predetermined amount/threshold (Page 14, Lines 13-20); and

- enabling the grouping (consolidating) of medical procedures/cases (Page 19, Lines 11-14).

While Hirsch et al. teaches that the medical procedure scheduling system and method utilizes any of a plurality of cost functions/constraints to optimize (finalize) a schedule Hirsch et al. does not expressly teach one of those constraints a patient's total examination time as claimed.

Official notice is taken that minimizing the idle (unused, wasted, waiting, etc.) time a user (patient, individual, customer, etc.) spends before or during the provision of a service is old and well known. For example it is old and well known to minimize the time individuals spend waiting in line to meeting to a service representative such as a physician for a scheduled medical appointment thereby reducing the frustration felt by customers who are left unattended for extended period of time. One such schedule minimization technique is grouping (consolidating) medical procedures together so as to minimize the number of trips a person would have to make to a doctor; instead of scheduling one phase of a medical examination/procedure to occur at its earliest possible time, for example on Tuesday, just to fill in an available/empty time slot and asking the patient to come back on Friday for the second phase of a medical examination/procedure when it is possible to schedule the patient to have both phases of the procedure conducted on the Friday.

It would have been obvious to one skilled in the art at the time of the invention that the medical, with its ability to be optimize (finalize, confirm) medical procedure schedules utilizing any of a plurality of custom constraints (e.g.

minimize the inconvenience of patients waiting for medical procedures) as taught by Hirsch et al.; would have benefited from optimizing the schedule to minimize a patient's total examination time (i.e. from start of the patient's first medical equipment/station appointment to the completion/end time of the patient's last medical equipment/station) is greater than or equal to some/any predetermined time limit (e.g. maximum allowable wait/exam time) in view of official notice; the resultant system improving the satisfaction by lessening the frustration of patients waiting for scheduled medical procedures.

13. Regarding Claims 3, 5 and 7-8 Hirsch et al. teach a medical procedure scheduling system and method wherein the system utilizes a well known client/server architecture (Page 13, Lines 7-9), has a wireless communication subsystem (paging software; Page 14, Line 5), is accessible via at least two external hospital systems and utilizes well known standards for storing and medical structuring data (Page 9, Lines 1-5 and 15-25).

Hirsch et al. further teach that the medical procedure scheduling system and method stores and displays schedule information using records and tables (Figures 3, 5, 7).

Hirsch et al. does not expressly teach that the medical procedure scheduling method and system utilizes a database or enables access to the system (e.g. database) from an external network as claimed.

Both Tognazzini and Wayne et al. teach that their respective scheduling systems utilize a plurality of databases to store schedule and other related information (Tognazzini: Column 4, Lines 41-68; Column 5, Lines 5-13; Figure 1; Wayne et al.: Column 5, Lines 37-56; Figure 1) and enable access to the system (e.g. database) from an external network (Tognazzini: "paging network"; Column 6, Lines 18-44; Figure 1; Wayne et al.: Figure 1).

It would have been obvious to one skilled in the art at the time of the invention that the medical procedure scheduling method and system as taught by Hirsch et al. would have benefited from enabling users to access the system from an external network in view of the teachings of Tognazzini and/or Wayne et al.; the resultant system automatically responding and communicating changes to a remote users' schedule of appointments thereby making it easier for patients to monitor their schedule and receive dynamic appointment/schedule route guidance remotely (Tognazzini: Column 1, Lines 50-53).

14. Regarding Claim 4 Hirsch et al. teach a medical procedure scheduling system and method wherein the system:

- utilizes an optimization engine/subsystem to account for (e.g. optimizes the appointment schedule) delays, cancellations (Page 3, Lines 13-15), unexpected events and a plurality of constraints/criteria during the optimization of the schedule (Page 2, Lines 6-9; Page 3, Lines 13-15; Page 12, Lines 5-8);

- reschedules (shifts, adjusts, re-optimizes, etc.) patients and/or medical examination items based on actual conditions present in the system/environment (Page 5, Lines 22-24; Page 18, Lines 24-26);

- provides/displays the updated/revised schedule (Figures 14A-14B); and

- notifies users of scheduling conflicts encountered during the scheduling process and/or when the schedule optimization is successful ("paging software", Page 14, Line 5; Page 19, Lines 24-25; "intelligent messaging", Figure 1).

Hirsch et al. does not expressly teach that the medical procedure scheduling system and method eliminates (removes, deletes, un-schedules, etc.) the patient from the medical examination item's queue (schedule, list, etc.) or provides appointment schedule change notification(s) to patients.

Tognazzini teaches providing change notices to users of the portable calendaring/scheduling system and method, in an analogous art of scheduling, for the purposes of alerting and/or reminding users of changes to the schedule (Column 1, Lines 60-68; Column 7, Lines 1-10).

It would have been obvious to one skilled in the art at the time of the invention that the medical procedure scheduling system and method, with its ability to dynamically schedule, optimize and notify (e.g. via a wireless paging system) patients (users) and other resources of their schedules, as taught by Hirsch et al. would have benefited from providing patients with a portable

calendaring/scheduling system and method wherein users receive appointment reminders and/or schedule change notifications in view of the teachings of Tognazzini; the resultant system automatically responding and communicating changes to a remote users' schedule of appointments thereby making it easier for patients to monitor their schedule (Column 1, Lines 50-53).

Wayne et al. teach the removal of service providers and service requestors from their appropriate queues upon the servicing (Column 17, Lines 2-13) and canceling ("abandon" page/queue/line; Column 8, Lines 58-65) or an appointment as well as notifying service requestors when a service provider is available (Column 2, Lines 34-37).

Wayne et al. further teach that the service allocation system and method utilizes a plurality of queues to schedule service appointments for a plurality of individuals wherein the customer selection process/subsystem (column 15, Lines 65-68; Column 16, Lines 1-68; Column 17, Lines 1-49) comprises:

- finding a service agent/provider that meets (has, matches, satisfies, etc.) a predetermined set of criteria such as availability, skill level, and the like;

- assigning/scheduling an appointment between the service agent and service requester (individual, patient); and

- removing (deleting, eliminating, un-scheduling, etc.) the selected/scheduled individual service requestor from the service requestor queue and removing the service provider from the resources queue (Column 8, Lines 2-13; Column 17, Lines 1- 21).

It would have been obvious to one skilled in the art at the time of the invention that the medical procedure scheduling method and system as taught by Hirsch et al. would have benefited from utilizing the well known queue management techniques/approaches such as moving and/or removing resources from appropriate queues dues to schedule changes or cancellations in view of the teachings of Wayne et al.; the resultant system being further adapted to efficiently handle unanticipated/unscheduled medical procedure requests (e.g. the occurrence of a natural disaster requires the medical facility to queue a large number of unanticipated patients to be scheduled for medical procedures; Hirsch et al.: Page 2, Lines 6-9).

15. Regarding Claim 6 Hirsch et al. teach a medical procedure scheduling system and method wherein the system:

- determines when a patient completes a medical examination for one of the medical examination items (resources, equipment, stations, personnel, etc.; Page 2, Lines 6-9; Page 18, Lines 1-6);

- determines when a patient is running late (i.e. does not complete a medical examination for one of the medical examination items in a predetermined period of time (average appointment/examination time; Page 2, Lines 6-9; Page 18, Lines 12-15); and

- updates (changes, adjusts, etc.) the patients' schedule to account for the schedule delays (Page 5, Lines 22-24; Page 12, Lines 7-9; Page 19, Lines 1-17; Figure 13).

Hirsch et al. does not expressly teach that the medical procedure scheduling system and method eliminates (removes, deletes, dequeues, etc.) completed appointments from the patient's queue (schedule) or reschedules a patients delayed medical examination item to the next available appointment.

Wayne et al. the removal of completed (serviced) appointments from the service provider and service requestor queues, in an analogous art of scheduling and queue management, for the purposes of managing the queue utilizing well known queue management techniques (e.g. the removal of items from a queue upon the servicing of that item in the queue; Column 17, Lines 2-20).

It would have been obvious to one skilled in the art at the time of the invention that the medical procedure scheduling system and method as taught by Hirsch et al. would have benefited from removing from a patient's queue of medical examination item appointments completed appointments in view of the teachings of Wayne et al.; the resultant system ensuring patients are not re-scheduled/scheduled for appointments that they have already completed.

Official notice it taken that rescheduling a delayed appointment to the next available appointment is old and very well known.

It would have been obvious to one skilled in the art at the time of the invention that the medical procedure scheduling system and method as taught by Hirsch et al. would have benefited from rescheduling delayed appointments (medical examination item appointments) to the next available appointment; the resultant system ensuring patients are re-scheduled/scheduled for their next one or more medical examination item appointments at the earliest possible time thereby minimizing their total examination time.

16. , Regarding Claims 9-10 Hirsch et al. teach a medical procedure scheduling system and method further comprising:

- a computer (system, laptop, PC, personal computer, etc.) at a medical examination site (location) comprising of wireless communication subsystem ("page software", Page 14, Line 5) and display components/devices (Page 9, Lines 1-3; Page 13; Figures 1-12, 14A-14B);

- communication between the system (server) and the computer (client/service architecture; Page 13, Lines 1-9); and

- outputting (displaying, printing, sending, etc.) information related to the patient's completion of the examination (Figures 14A-14B).

17. Regarding Claim 11 Hirsch et al. teach a medical procedure scheduling method and system wherein the system:

- utilizes a plurality of computing platforms (Page 12, Lines 26-27) wherein the computing platform includes a computer, network connectivity and wireless communication subsystem ("paging software"; Page 13, Line 15, Page 14, Line 5);

- has a client server architecture (distributed computing consisting of one or more client devices and a server; Page 13, Lines 7-9);

- provides a graphical user interface (Figures 1-12);

- includes an appointment scheduler subsystem (component, module, software, code, etc.) comprising ("...identifying the resources required for performing each of said plurality of medical procedures and determining every feasible schedule for the plurality of medical procedures...", Page 4, Lines 9-13; Page 18, Lines 1-27; Figures 11, 14A-14B):

  - a queue (ordered list, array, sequence, schedule, line, etc.) of patients ("first come first serve" policy/procedure, Page 19, Lines 2-5; Page 10, Lines 1-7 and 15-17; Page 15, Lines 26-30; Page 16, Lines 1-9; Figures 2-3);
  - a schedule for each examination item (equipment, resources, personnel, etc.; Page 6, Lines 10-19; Figures 4-12); and
  - a schedule for each patient comprising examination items needed for patient's examination (Page 6, Lines 10-19; Figure 11);

- a schedule optimization subsystem (engine) wherein schedules are optimized utilizing well known and commercially available systems (e.g. CPLEX; Page 19, Lines 19-23) that optimize cost functions/custom optimization criteria/factors/constraints including but not limited to: priorities, unscheduled events, waiting lists (e.g. queues), precedence (e.g. order, sequence of events) and the like (Page 10, Lines 7-9; Page 11, Lines 1-30; Figure 13);

- schedules a plurality of patient cases/medical item/equipment appointments based on user requests (e.g. surgeons requests a plurality of resources to perform a medical procedure for a patients) including start time/day, required resources (operating room, equipment, personnel/staff, etc.) and a plurality of system constraints, hospital policies/procedures (Pages 11-12; Figure 13).

- displays schedules (images, icons, text, etc.) corresponding to the appointment schedule of medical procedures (patients, equipment, surgeons, etc.) including the location of patients (e.g. the operating room being utilized by a patient at a particular moment in time; Figures 14A-14B);

- generates (forms, determines, etc.) and displays examination guidance to individual patients wherein the guidance comprises the order and start times for each of the scheduled medical equipment/items (e.g. appointment/schedule information; Page 10, Lines 1-8; Page 18, Lines 1-15; Figures 11-12).

Hirsch et al. further teach that the medical procedure scheduling system and method:

- divides days (a day representing a schedule/queue of sequentially scheduled appointments) into a plurality of time slots wherein some of the time slots are empty (physically vacant, unused, not-scheduled, etc.; Column 14, Lines 9-20; Figures 14A-14B);

- determines and utilizes an inconvenience period, defined as the difference between the appointment start time requested and start time scheduled, as a schedule optimization constraint/criteria to ensure users requested start times are not scheduled later than a predetermined amount/threshold (Page 14, Lines 13-20);

- treats appointment schedule requests on a first come first serve basis (FIFO queue; Page 19, Lines 2-15);

- determines the average time required to perform medical procedures (Page 16, Lines 25-28) and utilizes those times to determine the expected appointment completion times (Page 18, Lines 10-15); and

- determines when a patient is running late (i.e. does not complete a medical examination for one of the medical examination items in a predetermined period of time (e.g. average appointment/examination time; Page 2, Lines 6-9; Page 18, Lines 12-15); and

- updates (changes, adjusts, etc.) the patients' schedules to account for the delays (Page 5, Lines 22-24; Page 12, Lines 7-9; Page 19, Lines 1-17; Figure 13).

Hirsch et al. inherently teaches that the display (providing, presenting, etc.) of the earliest start time of the next available appointment (e.g. a medical

examination item start time) is the earliest of (Page 4, Lines 7-12; Figure 13, 14A-14B):

- the start time of the first open/available appointment (empty slot, physically vacant, empty queue id, etc.) an empty queue time (time slot) exists, or

- the time immediately after (following) the last/final medical examination item's appointment when an empty queue time does not exist (i.e. the schedule has no isolated appointments that are available for scheduling therefore making the time immediately after the last appointment the first available time for the next appointment scheduled.

Hirsch et al. does not expressly teach that the medical procedure scheduling system and method provides plurality of wireless handheld devices to each patient, represents/models medical examination and/or medical examination items utilizing queue data structures or scheduling appointments to start at the earliest possible time.

Tognazzini teaches the utilization of wireless handheld devices by users to manage and "navigate" a plurality of scheduled appointments, in analogous art of scheduling (appointment management, personal information management, etc.), for the purposes of providing users with accurate and up-to-date schedules, location based appointment reminders and appointment route guidance (Abstract; Column 1, Lines 5-68; Column 2, Lines 1-68).

Tognazzini teaches a portable location based scheduling system and method comprising:

- providing one or more wireless handheld devices (e.g. personal digital assistant, cell phone, laptop, wireless devices, etc.) to users wherein the wireless handheld devices include display and wireless communication components (Column 4, Lines 41-68; Figure 1);

- a server including a display, memory, processing, wireless/wired communication component(s) (Column 4, Lines 40-68; Column 5, Lines 1-20; Figure 1);

- determining and alerting a user of schedule/appointment delays based on the user's schedule, current location, next scheduled appointment location and start time (Column 7, Lines 3-10);

- creating and displaying scheduled appointment guidance information including but not limited to order/sequence, start times and travel route (map and directions; Column 2, Lines 1-25; Column 12, Lines 60-68);

- near real-time synchronization of schedule/appointment information between the user's wireless handheld device and the central system (server, office system; Abstract; Column 1, Lines 63-68); and

- enabling access to the system (e.g. database) from an external network ("paging network"; Column 6, Lines 18-44; Figure 1).

It would have been obvious to one skilled in the art at the time of the invention that the medical procedure scheduling system and method, with its

ability to dynamically schedule, optimize and notify (e.g. via a wireless paging system) patients (users) and other resources of their schedules, as taught by Hirsch et al. would have benefited from providing patients with a portable calendaring/scheduling system and method wherein each user utilizes a handheld wireless device that provides location based scheduling and appointment guidance (appointment, schedule, maps/directions to scheduled appointments, etc.) in view of Tognazzini; the resultant system automatically responding and communicating changes to a remote users' schedule of appointments thereby making it easier for patients to monitor their schedule and receive dynamic appointment/schedule route guidance remotely (Column 1, Lines 50-53).

Wayne et al. teach utilizing a plurality of queues to allocate (schedule, provide) services, in an analogous art of scheduling and queue management (e.g. medical appointment scheduling; Column 1, Lines 5-24), for the purposes of providing (allocating) services to a plurality of individuals who have requested services (Abstract) while alleviating individual "aggravation" associated with waiting in a line/queue to be serviced (Column 1, Lines 5-24).

Wayne et al. teach that the service scheduling system and method comprises:

- a plurality of wireless communication devices held by (assigned to) each individual requesting services in communication with a central system/server (Column 1, Lines 40-45; Figures 3-4);

- assigning each individual to one of a plurality of queues for scheduling purposes (Column 1, Lines 45-50; Column 5, Lines 3-10; Figure 7);

- indicating that a service resource (e.g. medical examination item) is available, notifying the "next" individual (e.g. patient) that service is available and providing the requested services (e.g. medical examination) to the "next" individual in the queue (Column 1, Lines 40-65; Column 3, Lines 2-9);

- providing (scheduling) servers to start at the earliest possible start time (e.g. FIFO queue; Column 1, Lines 57-60);

- enabling the moving (reassignment) of individuals between one or more of the plurality of queues (Column 1, Lines 60-68; Column 14, Lines 15-68);

- determining an expected wait period/time (Column 2, Lines 5-12; Figure 19);

- tracking/monitoring and alerting the user of his/her status in the queue (location in line, time spent in line, etc.: Column 12, Lines 19-45); and

- optimizing the allocation/scheduling of services so as to minimize an individual's total wait/service time such that:

    - if a users/individuals' total wait time (service time) is below a predetermined threshold they remain in the queue ("If the customer spent no more than five minutes outside his shopping queue, the customer will continue to wait for the proper agent.", Column 17, Lines 25-30) or

    - if a users/individuals' total wait time (service time) is above a predetermined threshold the system relaxes several of the scheduling

constraints in order to minimize the individuals total wait time (Column 17, Lines 31-49).

It would have been obvious to one skilled in the art at the time of the invention that the medical procedure scheduling system and method, with its ability to optimally schedule a plurality of medical procedures based on a plurality of constraints such as waiting lines/queues and unanticipated/unplanned events, as taught by Hirsch et al. would have benefited from modeling/representing appointment requests and medical examination schedules as queues in view of the teachings of Wayne et al.; the resultant system being further adapted to efficiently handle unanticipated/unscheduled medical procedure requests (e.g. the occurrence of a natural disaster requires the medical facility to queue a large number of unanticipated patients to be scheduled for medical procedures; Hirsch et al.: Page 2, Lines 6-9).

Official notice is taken that the scheduling of appointments for the earliest possible start time, for example individuals waiting in a line (queue) for a service inherently serves individuals in the queue at the earliest possible start time.

Further official notice is taken that scheduling of appointments for the earliest possible start time wherein the earliest start time of an appointment is determined by the earliest possible availability of one or a plurality of resources necessary for the appointment (e.g. patient, doctor, room, equipment availability)

is old and very well known in the art to ensure that the appointment is not schedule at a time where the requested service can not be provided.

It would have been obvious to one skilled in the art at the time of the invention that the medical procedure scheduling method and system, with its ability to accept medical examination and medical examination item requests from a plurality of users wherein the requests are processed on a first come/first sever basis (i.e. first in first out, FIFO, queue) and its ability to dynamically adapt/revise/optimize appointment schedules to meet unanticipated events (delays, emergencies, etc.) and ensure resource availability, as taught by Hirsch et al. would have benefited from scheduling appointments at the earliest time possible (e.g. scheduling an emergency procedure as soon as possible) wherein the earliest start time possible for the appointment is determined by the earliest time one or more required resources (patients, doctors, equipment, etc.) are all available in view of the teachings of official notice; the resultant system being "equipped to handle unexpected events such as emergencies.." in an efficient and systematic manner (Hirsch et al.: Page 2, Lines 6-9).

18. Regarding Claims 13, 15 and 17-18, claims 13, 15 and 17-18 recite similar limitations to Claims 3, 5 and 7-8 and are therefore rejected using the same art and rationale as applied in the rejection of Claims 3, 5 and 7-8.

19. Regarding Claim 14 Hirsch et al. teach a medical procedure scheduling system and method wherein the system:

- accounts for (e.g. optimizes the appointment schedule) delays, cancellations (Page 3, Lines 13-15), unexpected events and a plurality of constraints/criteria during the optimization of the schedule by the optimization engine/subsystem (Page 2, Lines 6-9; Page 3, Lines 13-15; Page 12, Lines 5-8);

- reschedules (shifts, adjusts, re-optimizes, etc.) patients and/or medical examination items dues to the actual conditions present in the system/environment (Page 5, Lines 22-24; Page 18, Lines 24-26);

- provides/displays the updated/revised schedule (Figures 14A-14B); and

- notifies users of potential conflicts/challenges encountered during the scheduling process and/or when the schedule optimization is successful ("intelligent messaging", Figure 1; "paging software", Page 14, Line 5; Page 19, Lines 24-25).

Hirsch et al. does not expressly teach that the medical procedure scheduling system and method eliminates (removes, deletes, un-schedules, etc.) the patient from the medical examination item's queue (schedule, list, etc.) or provides appointment schedule change notification to patients.

Tognazzini teaches providing change notices to users of the portable calendaring/scheduling system and method, in an analogous art of scheduling,

for the purposes of alerting and/or reminding users of changes to the schedule (Column 1, Lines 60-68; Column 7, Lines 1-10).

It would have been obvious to one skilled in the art at the time of the invention that the medical procedure scheduling system and method, with its ability to dynamically schedule, optimize and notify (e.g. via a wireless paging system) patients (users) and other resources of their schedules, as taught by Hirsch et al. would have benefited from providing patients with a portable calendaring/scheduling system and method wherein users receive appointment reminders and/or schedule change notifications in view of Tognazzini; the resultant system automatically responding and communicating changes to a remote users' schedule of appointments thereby making it easier for patients to monitor their schedule (Column 1, Lines 50-53).

Wayne et al. teach the removal of service providers and service requestors from their appropriate queues upon the servicing (Column 17, Lines 2-13) and canceling ("abandon" page/queue/line; Column 8, Lines 58-65) as well as notifying service requestors (e.g. patients status updates and when a service provider (e.g. medical examination/doctor) is available (Column 2, Lines 34-37).

Wayne et al. further teach that the service allocation system and method utilizes a plurality of queues to schedule service appointments for a plurality of individuals wherein the customer selection process/subsystem (column 15, Lines 65-68; Column 16, Lines 1-68; Column 17, Lines 1-49) comprises:

- finding a service agent/provider that meets (has, matches, satisfies) a predetermined set of criteria such as availability, skill level, etc.

- assigning/scheduling an appointment comprising the service agent and service requester (individual, patient); and

- removing (deleting, eliminating, un-scheduling, etc.) the selected/scheduled individual service requestor from waiting queue and removing the service provider from resources queue (schedule, list, etc.; Column 8, Lines 2-13; Column 17, Lines 1- 21).

It would have been obvious to one skilled in the art at the time of the invention that the medical procedure scheduling method and system as taught by Hirsch et al. would have benefited from utilizing the well known queue management techniques (e.g. moving and/or removing resources from appropriate queues dues to schedule changes or cancellations) in view of the teachings of Wayne et al.; the resultant system, with its utilization of queue management techniques, being further adapted to efficiently handle unanticipated/unscheduled medical procedure requests (e.g. the occurrence of a natural disaster requires the medical facility to queue a large number of unanticipated patients to be scheduled for medical procedures; Hirsch et al.: Page 2, Lines 6-9).

20. Regarding Claim 16 Hirsch et al. teach a medical procedure scheduling system and method wherein the system:

- determines when a patient completes a medical examination for one of the medical examination items (resources, equipment, stations, personnel, etc.; Page 2, Lines 6-9; Page 18, Lines 1-6);

- determines when a patient is running late (i.e. does not complete a medical examination for one of the medical examination items in a predetermined period of time (e.g. average appointment/examination time; Page 2, Lines 6-9; Page 18, Lines 12-15); and

- updates (changes, adjusts, etc.) the patients' schedules to account for the schedule delays (Page 5, Lines 22-24; Page 12, Lines 7-9; Page 19, Lines 1-17; Figure 13).

Hirsch et al. does not expressly teach that the medical procedure scheduling system and method eliminates (removes, deletes, dequeues, etc.) completed appointments from the patient's queue (schedule) or rescheduling a patients delayed medical examination item to the next available appointment.

Wayne et al. the removal of completed (serviced) appointments from the service provider and service requestor queues, in an analogous art of scheduling and queue management, for the purposes of managing the queue utilizing well known queue management techniques (e.g. the removal of items from a queue upon the servicing of that item in the queue; Column 17, Lines 2-20).

It would have been obvious to one skilled in the art at the time of the invention that the medical procedure scheduling system and method as taught by Hirsch et al. would have benefited from removing from a patient's queue of medical examination item appointments completed appointments in view of the teachings of Wayne et al.; the resultant system ensuring patients are not re-scheduled/scheduled for appointments that they have already completed.

Official notice it taken that rescheduling a delayed appointment to the next available appointment is old and very well known.

It would have been obvious to one skilled in the art at the time of the invention that the medical procedure scheduling system and method as taught by Hirsch et al. would have benefited from rescheduling delayed appointments (medical examination item appointments) to the next available appointment; the resultant system ensuring patients are re-scheduled/scheduled for their next one or more medical examination item appointments at the earliest possible time thereby minimizing their total examination time.

Examiner's Note

21. While each of the elements of the **disclosed** invention are old and well known in the art of resource scheduling and queue management the combination of the elements and their specific application to the scheduling of on-site medical examinations in a mobile and dynamic environment appears to suggest that the **disclosed** invention appears to be allowable over the cited prior art.

Specifically the applicants disclosed invention of an on-site mobile medical examination scheduling system and method for the scheduling of one or more patient medical examinations, the medical examinations having associated medical examination items (e.g. equipment, stations, resources, etc.), in a dynamic environment (changing/non-static locations of medical examination items) wherein the system:

- represents patients and medical examination items schedules as queue data structures; and

- provides each patient with a wireless handheld device, in communication with the central system/server, that enables the user and the system to monitor their medical examination schedule (e.g. progress) and provide/receive route guidance in the form of dynamic maps/directions to the next scheduled medical examination item appointment.

Examiner notes that the invention, **as currently claimed**, does not claim each of the distinguishing limitations disclosed and therefore is rejected for the reasons discussed above.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Rassman et al., U.S. Patent No. 4,937,743, teach a method and system for scheduling medical procedures, the procedures including the reserving of a plurality of resources (patients, personnel/staff, medical equipment, rooms, etc.). Rassman et al. further teach that the expert medical procedure scheduling system accounts for and provides notices of delays/cancellations (e.g. a scheduled appointment runs longer than a predetermined time amount), enables users to track events and procedures (e.g. current status, completed, delayed, not started, etc. as well as the location of appointment) and further that the schedule includes empty (unused, isolated, physically vacant) time slots.

- Friedman, Mark, U.S. Patent No. 5,032,083, teaches a mobile calendaring/scheduling system and method wherein the system provides guidance (instruction) for the completion of location and time specific tasks as part of an individual's overall schedule of appointments. Friedman further teaches that the mobile scheduling and guidance system monitors and compares task progress against predetermined time allocations, captures task completion information and provides travel route guidance from one appointment to the next.

- Garcia, Angela, U.S. Patent No. 5,065,315, teaches a system and method for scheduling patient related services (e.g. medical examination procedures.) wherein the system accounts for unanticipated examination requests (e.g. emergencies), utilizes patient/service location information as well

as updates a patient's appointment schedule as examination items are completed in order to minimize patient wait times.

- Mahoney et al., U.S. Patent No. 5,502,806, teach a waiting line (queue) management system and method utilized when demand for a particular resource/service exceeds the capacity of that resource/service. Mahoney et al. further teach that the queue management system enables users to cancel and reschedule appointments (time slots), revise/update of the queue based on user cancellations/reschedules and has a distributed client/server architecture.

- Delorme et al., U.S. Patent No. 5,559,707, teach a method and system for providing users with travel route guidance (directions) between a plurality of waypoints/destinations.

- Small et al., U.S. Patent No. 5,642,303, teach a method and system for providing time and location based computing wherein the system enables other systems (applications, components, devices, etc.), comprising of a central system and a plurality of wireless handheld devices to utilize a users location and current time information to provide a plurality of location/time-based services (e.g. location based appointment scheduling, location based to-do list reminders, etc.).

- Mooney et al., U.S. Patent No. 5,831,534, teach a system and method for determining when a patient has completed a medical examination item and notifying appropriate resources.

- Lubin et al., U.S. Patent No. 5,991,730, teach a system and method for tracking a patient's visit to a medical facility (e.g. current status), the visit

comprising a plurality of medical examination items (related interactions) and further wherein a plurality of information is collected and analyzed for such things as scheduling.

- Hirayama et al., U.S. Patent No. 6,179,358, teach a complete portable (mobile, transportable, etc.) medical facility/hospital system and method that can be utilized to provide on-site medical procedures (treatment, examinations, triage, etc.) to a large number of patients.

- Boies et al., U.S. Patent No. 6,3299,919, teach a method and system for managing a waiting line (reservation queue) for a limited resource wherein the system enables user to request as well as cancel resource appointments and are notified of the availability of the resource. Boies et al. further teach that if individuals do not fulfill an appointment (reservation) in a predetermined amount of time the system updates the resource queue and notifies the next scheduled individual that the resource is available.

- Cummings et al., U.S. Patent No. 6,345,260, teach an online method and system for scheduling medical resources (personnel) wherein individuals/service requestors can schedule and confirm a plurality of resources (type of appointments) and the system automatically determines the appropriate amount of time necessary to complete each appointment.

- Ralston et al., U.S. Patent No. 6,389,454, teach a method and system for scheduling multi-facility (i.e. multi-location) appointments wherein each of the facilities may provide a plurality of services (e.g. multiple procedures in a procedure group that are related and some of which may need to be performed

on the same day or in a specific sequence) and that the system enables service requestors to schedule, reschedule, confirm and cancel appointments.

- Dussell et al., U.S. Patent No. 6,411,899, teach a location based personal digital assistant (PDA) wherein a mobile wireless handheld device facilitates the scheduling and completion of a plurality of tasks, each tasks comprising a plurality of information including but not limited to the location of the task. Dussell et al. further teach that the mobile calendaring/scheduling system provides travel route guidance (map, directions, "best route") information guiding users from one appointment to the next.

- Rattner, Manfred, U.S. Patent No. 6,421,649, teaches a method and system for monitoring and adjusting a schedule of medical appointments (sequence/flow of events) so that a pre-planned appointment schedule involving a plurality of different medical resources (organizations) can be adjusted to account for delays or other changes/revisions. Rattner further teaches that the system provides change notices to users of the system of the update schedule.

- Moczygemba, Roger, U.S. Patent Publication No. 2002/0059082, an online medical appointment scheduling (appointment docketing) system and method that minimizes the patients total examination time by minimizing/eliminating time wasted in waiting for an appointment (e.g. a delayed appointment) and enables patients to schedule multiple appointments with multiple medical/healthcare providers in multiple locations.

- Bayne, Cary Gresham, U.S. Patent Publication No. 2005/0060198, teaches a method and system for providing on-site medical services (examination, procedures).

- Ross, Richard Thomas, GB2315350, teaches a service management system and method wherein the system utilizes a queue to schedule appointments for a plurality of service providers and service requestors.

- Tanabe et al., JP2002-329002, teach an appointment scheduling system and method wherein individuals can schedule appointments at a plurality of locations.

- Kobayaski, Michio, JP2002-74121, teach an online medical appointment scheduling system and method that provides appointment status/progress information to users thereby enabling users to grasp the schedule's deviation from the original appointment schedule.

- Yaho, Shuhei, JP2003-30416, teach a visitor appointment schedule guidance system and method that provides users/visitors with destination information.

- Okazaki et al., JP2004-110238, teach medical guidance system and method.

- Ratschuna, Kalevi, WO 01/04577 A1, teach a mobile calendaring/scheduling system and method wherein the system provides schedule information for location and time based appointments.

- HouseCall Journal, Today Show Picks Call Doc, teaches a commercially available system and method that provides scheduled on-site medical procedures.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott L. Jarrett whose telephone number is (571) 272-7033. The examiner can normally be reached on Monday-Friday, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hafiz Tariq can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SJ
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TARIQ R. HAFIZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600